What is claimed is:

1. A process for manufacturing a composite polymeric circuit protection device, said process comprising

(1) providing a polymeric assembly comprising

(a) providing first and second laminates, each of which comprises a laminar polymer element having at least one conductive surface,

(b) providing a pattern of conductive material on at least one of the conductive surfaces on one laminate;

(c) securing the laminates in a stack in a desired configuration, at least one conductive surface of at least one of the laminates comprising an external conductive surface of the stack, and

(d) making a plurality of electrical connections between a conductive surface of the first laminate and a conductive surface of the second laminate; and

(2) subdividing the stack into individual devices each of which comprises at least one electrical connection.

2. A process according to claim 1, wherein the pattern in step (b) is formed by selectively removing a portion of conductive material from at least one of the conductive surfaces on one laminate.

3. A process according to claim 1, which further comprises providing a pattern of conductive material on at least one of the external conductive surfaces.

4. A process according to claim 3, wherein the pattern on the external conductive surface is formed by selectively removing a portion of conductive material from the external conductive surface.

5. A process according to claim 3, wherein at least one of the patterned external conductive surfaces is at least partially covered with an insulating layer.

6. A process according to claim 1, wherein an additional conductive layer is added to at least part of at least one of the external conductive surfaces.

7. A process according to claim 1 wherein steps (c) and (d) are performed simultaneously.

8. A process according to claim 1, wherein at least one laminate is marked to provide a unique identification of orientation.

9. A process according to claim 1, wherein the assembly comprises a third laminate.

10. A process according to claim 2, wherein the selective removal of conductive material is accomplished by etching, milling, or stamping.

11. A process according to claim 1, wherein the laminates are secured to each other in the stack by an adhesive.

12. A process according to claim 1, wherein electrical connection is made between conductive surfaces of the first and second laminates in the stack by (i) forming an aperture which extends through the stack, and (ii) forming a conductive member within the aperture.

13. A process according to claim 1, wherein the electrical connections are positioned so that the individual device comprises at least two electrical connections.

14. A process according to claim 1, wherein the laminar polymer element in at least one of the laminates comprises a PTC conductive polymer composition.

15. A process according to claim 14, wherein the laminar polymer element in each laminate comprises the same PTC conductive polymer composition.

16. A process according to claim 14, wherein the laminar polymer element in each laminate comprises a different PTC conductive polymer composition.

17. A process according to claim 1 wherein the assembly comprises three laminates, each of which comprises a PTC conductive polymer composition.

18. A process according to claim 1, wherein at least one of the laminar polymeric elements comprises a ZTC conductive polymeric material or an NTC conductive polymeric material.

19. A process according to claim 1, wherein at least one of the laminar polymeric elements comprises an insulating polymeric material.

20. A process according to claim 3, wherein the patterns on the internal and external conductive surfaces are different.

21. A process according to claim 1, wherein the individual devices are subdivided from the assembly using a saw, a shear, a blade, a wire, a waterjet, a snapping device, a laser, or a combination of these.

22. A process according to claim 8, wherein the laminate markings which provide a unique identification of orientation also provide delineation for subdividing into individual devices.

23. A process according to claim 1 wherein the conductive surface on each laminate comprises a metal foil.

24. A polymeric assembly comprising:

(a) a first laminate comprising a laminar polymer element having at least one conductive surface having a pattern;

(b) a second laminate comprising a laminar polymer element having at least one conductive surface having a pattern, said second laminate being secured to the first laminate in a stack so that the stack has first and second external conductive surfaces;

(c) a plurality of transverse conductive members which run through the first and second laminates between the first and second external conductive surfaces.

25. A composite device comprising

(1) first and second external laminar electrodes,

(2) third and fourth internal laminar electrodes,

(3) first and second laminar PTC resistive elements, each of which (i) exhibits PTC behavior, and (ii) comprises a laminar element composed of a PTC conductive polymer,

said first resistive element having a first face to which the first external electrode is secured and an opposite second face to which the third internal electrode is secured, and said second resistive element having a first face to which the second external electrode is secured and an opposite second face to which the fourth internal electrode is secured,

(4) a fifth external laminar conductive member which is (i) secured to the first face of the first PTC resistive element, and (ii) is spaced apart from the first external electrode,

(5) a sixth external laminar conductive member which (i) is secured to the first face of the second PTC resistive element, and (ii) is spaced apart from the second external electrode,

(6) a seventh internal laminar conductive member which (i) is secured to the second face of the first PTC resistive element, and (ii) is spaced apart from the third internal electrode,

(7) an eighth internal laminar conductive member which (i) is secured to the first face of the second PTC resistive element, and (ii) is spaced apart from the fourth internal electrode,

(8) a first aperture which runs between the first external electrode of the first laminar PTC element and the second external electrode of the second laminar PTC element,

(9) a second aperture which runs between the fifth external laminar conductive member of the first laminar PTC element and the sixth external laminar conductive member of the second laminar PTC element,

(10) a first transverse conductive member which

(a) lies within the first aperture,

(b) runs between the first external electrode of the first laminar PTC element and the second external electrode of the second laminar PTC element,

(c) is secured to the first PTC element, the second PTC element and the third laminar element, and

(d) is physically and electrically connected to the first external laminar electrode, the seventh internal laminar conductive member, the eighth internal laminar conductive member, and the second external laminar electrode, but is not connected to the third or the fourth internal electrode, and

(11) a second transverse conductive member which

(a) lies within the second aperture,

(b) runs between the fifth external laminar conductive member and the sixth external laminar conductive member,

(c) is secured to the first PTC element, the second PTC element and the third laminar polymer layer, and

(d) is physically and electrically connected to the fifth external laminar conductive member, the third internal electrode, the fourth internal electrode, and the sixth external laminar conductive member, but is not connected to the first or second external electrode.

26. A device according to claim 25 which further comprises a third laminar element which (i) comprises an insulating polymer, (ii) is inserted between the first and second laminar PTC resistive elements, and (iii) secures the first laminar PTC element to the second PTC element.